

AMENDMENT OF THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1 through 6. (Canceled).

7. (Currently Amended) A key-changeable lock, comprising, in combination:

(a) a lock housing,

(b) a lock cylinder for rotation within the lock housing about a rotational axis, the lock cylinder including,

(i) a locking block slidably mounted on a periphery of locking cylinder, and having a first working position and a second working position,

wherein the locking block extends from the lock cylinder to engage the lock housing, thereby directly preventing rotation of the lock cylinder relative the lock housing in the first working position, and

wherein the locking block at least partially retracts into the lock cylinder to allow rotation in the second working position,

(ii) a toothed piece with a block groove, wherein the toothed piece that moves is movable to allow or block retraction of the locking block into the lock cylinder and the toothed piece is positioned entirely within the lock cylinder,

(iii) a toothed slide that moves in the lock cylinder transverse to the rotational axis, the toothed slide having an engaged and disengaged positions with the toothed piece, the toothed piece moves in a fixed relationship with the toothed slide when in the engaged position, and in an independent relationship when in the disengaged position,

(iv) a sliding block that moves the toothed slide between the engaged and disengaged positions, and

(v) a locking hole provided on or in the lock cylinder and into which a key is inserted,

wherein insertion of a first key into the locking hole moves the toothed slide and in turn the toothed piece into the engaged position , so that the block groove allows

retraction of the locking block into the lock cylinder,

wherein rotation of the first key in turn rotates the lock cylinder, the locking block retracts into the lock cylinder sliding into the blocking groove,

wherein retraction of the locking block into the lock cylinder,

(i) prevents the toothed piece from moving with respect to the locking block, and

(ii) slides the sliding block linearly in a direction perpendicular to the rotational axis to disengage the toothed slide from the toothed piece, and

wherein removal of the first key and insertion of a second key moves the toothed slide to establish a new engagedment position between the toothed slide and the toothed piece, so that the second key now locks and unlocks the key changeable lock.

8. (Previously Presented) The key-changeable lock as claimed in claim 7, wherein the first key is removed and the second key is inserted when the lock cylinder is in a partially rotated position.

9. (Currently Amended) The key-changeable lock of claim 7, wherein ~~the engagement of the toothed slide with the toothed piece is via a toothed piece on the toothed slide, thereby engaging the toothed piece on the toothed piece, there being more teeth on one than the other to allow the independent relationship both the toothed slide and the toothed piece have teeth, and one of the toothed slide and the toothed piece has more teeth than the other of the the toothed slide and the toothed piece, to allow for a plurality of engaged positions between the toothed slide and the toothed piece, including the engaged position and the new engaged position.~~

10. (Previously Presented) The key-changeable lock of claim 7, wherein the block groove on the toothed piece runs parallel to the locking block, the toothed piece blocks retraction of the locking block, other than when the toothed piece is moved to allow the locking block to retract into the blocking groove.

11. (Previously Presented) The key-changeable lock of claim 7, wherein the locking block slides into the block groove, and is held in the block groove by the profile of the lock housing around the lock cylinder, when the lock is unlocked.
12. (Previously Presented) The key-changeable lock of claim 7, wherein the sliding block is moved by the locking block via pins extending between the locking block and the sliding block.
13. (Previously Presented) The key-changeable lock of claim 7, wherein springs between the sliding block and a shell bias the sliding block and the toothed slide into the engaged position.
14. (Previously Presented) The key-changeable lock of claim 7, wherein a compression spring is provided to bias the sliding block and in turn the toothed piece, when in the engaged position, to block retraction of the locking block.
15. (Previously Presented) The key-changeable lock of claim 14, wherein the compression spring is between the toothed slide and the sliding block.
16. (Previously Presented) The key-changeable lock of claim 7, wherein the sliding block and the toothed slide move parallel to one another.
17. (Previously Presented) The key-changeable lock of claim 7, wherein the sliding block moves perpendicular to the toothed piece.
18. (Currently Amended) The key-changeable lock of claim 7, wherein the first key is invalid after the new engagedment position has been established with the second key.
19. (Previously Presented) The key-changeable lock of claim 7, wherein the locking block moves parallel to the sliding block.

20. (Previously Presented) The key-changeable lock of claim 7, wherein a contactor is fixed on the toothed slide and located within the locking hole to engage the second key.

21. (Currently Amended) The key-changeable lock of claim 7, wherein ~~the-a~~ locking groove is on the lock housing;

when the locking block is located at the first working position, the locking block is received in the locking groove; and

each side face of the locking groove has a guiding slant.

22. (Currently Amended) A key-changeable lock, comprising, in combination:

a lock housing; and

a lock cylinder rotatable about a rotational axis within the lock housing, the lock cylinder includes a shell for the lock cylinder, a locking hole on the shell into which a key is inserted, and a locking block is slidably mounted on the shell between a first working position and a second working position;

a sliding block slidable in the shell linearly in a direction perpendicular to the rotational axis free of the lock housing, wherein the locking block abuts against a pin fixed within the sliding block, and positioned to abut against the locking block,

a toothed slide ~~for sliding~~ slidable in the sliding block, and a toothed piece} having a block groove, wherein the toothed piece is slidably disposed in the shell, and wherein the locking block has a first working position and a second working position,

wherein the locking block is not held in the block groove, the locking block extends from the lock cylinder to engage the lock housing thereby directly preventing rotation of the lock cylinder relative to the lock housing and the toothed piece engages the toothed slide when the locking block is in the first working position, and

wherein the locking block is held in the block groove and at least partially retracts into the lock cylinder to allow relative rotation of the lock cylinder with respect to the lock housing, and the toothed piece disengages the toothed slide when the locking block is in the second working position.

23. (Currently Amended) The key-changeable lock of claim 22, wherein springs are positioned between the sliding block and the shell.

24. (Previously Presented) The key-changeable lock of claim 22, wherein a compression spring is between the toothed slide and the sliding block.

25. (Previously Presented) The key-changeable lock of claim 22, wherein the sliding block moves perpendicular to the toothed piece.

26. (Previously Presented) The key-changeable lock of claim 22, wherein a contactor is fixed on the toothed slide and located in the locking hole.

27. (Previously Presented) The key-changeable lock of claim 22, wherein a locking groove is on the lock housing;

when the locking block is in the first working position, the locking block is received in the locking groove; and

each side face of the locking groove has a guiding slant.